



Grain

◆ ELEVATOR OPERATION
AND MAINTENANCE

September, 1937

For Votes and Relief Checks

This season of '37 witnesses the unusual spectacle of loaded wheat vessels heading out to sea instead of nosing in to our harbors. And as the faint, clinging spumes of smoke mark their course over the far horizon, a chuckling horde of gleeful grainmen line up before the deposit windows of the nation's banks.

Shining gold pieces are rolling back to the grain fields to replace the mountains of golden grain moving to market.

Knocked higher than the proverbial cocked hat is the political-developed theory that scarcity of grain makes for a prosperous agricultural industry. Based on 1938 May futures for leading commodities, the price level for all commodities may be expected to be about ten per cent less than last year, BUT, the farmers will increase their gross income by about one billion dollars and at the same time give the consumers more for their dollars.

Does this convince the Great Minds at our political helm that it is barely possible they have erred? Judge for yourself: Last week the board of directors of the American Farm Bureau adopted a resolution asking the President to call a special session of Congress in November for the purpose of drafting acreage control legislation. . . .

IF I KNEW YOU AND YOU KNEW ME

If I knew you and you knew me,
'Tis seldom we would disagree:
But never having yet clasped hands,
We often fail to understand
That each intends to do what's fair
And treat each other "on the square".
How little of complaint there'd be
If I knew you and you knew me.

If e'er we ship you by mistake,
Or on your bill some error make,
From irritation you'd be free
If I knew you and you knew me.
Or when some grain you'd fire back,
And make a kick on this or that,
We'd take it in good part you see,
If I knew you and you knew me.

Editorial

by DEAN M. CLARK

THE GREAT GIVER

WHEN a man steps into a store to make a purchase, his thought is to buy the best article obtainable for the least outlay of money. He takes great pride in the fact that he is a shrewd bargainer and glows with self-content when he has made a profitable deal.

Which is precisely as it should be.

For the buyer is bringing to the selling establishment a wad of hard earned money in return for the excellently made goods. His money represents to him the tangible token of his life's activities — and by using the term "life's activities" we do it advisedly, for the emoluments accruing a man from his daily toil represent the sum total of his existence.

He is brought up and educated to fit himself in the commercial world. And after he has found his place in this busy scheme of life, his every deed, on or off the job, is subconsciously governed by the exactions of that job. Many a man has left a congenial gathering of friends at the party's height because he knew he needed a good night's rest to prepare for a busy day. Countless men have curtailed their avocation activities so that those things would not interfere with their jobs. The JOB was the big thing — and the return in money for their labor was the concrete evidence of the worth of their stewardship of the day's twenty-four hours. With that innate idea in mind, the prospective buyer has every reason to get full return for his money.

But how about the seller? A moment's consideration will show you that he must be guided by the same principles for he, too, has given his life to perfecting his job and is entitled to the rewards of honest endeavor. His prospective customer approaches him amply supplied with money. That money represents the degree to which the customer has given himself to his particular job. The seller offers merchandise of a value determined by *his* application to the job. And so the whole thing boils down to two givers striking a deal. If the one had not given his all to perfecting his job, he would not have had the money to purchase the articles the other had given his all to produce.

So it is with all human endeavor. We must *give* to get. Whether it be our job, our family, our fraternity, or our church, we must, if we want the rewards, be "Great Givers."

GRAIN

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CHICAGO, ILLINOIS
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A forum for
OPERATIVE
and
MECHANICAL
PROBLEMS
in
TERMINAL
ELEVATORS

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FEDERAL TRADE COMMISSION'S REPORT

On the Elevator Situation

IN THE UNITED STATES



by C. D. STURTEVANT

President, Bartlett Frazier Company, Chicago

Before Elevator Superintendent's Convention



● I am very much impressed with the earnestness and seriousness of this convention. I have found that most conventions are 90% fun and only 10% work. You have better attendance at your sessions than A-N-Y conventions I have attended. You seem to be here for work alone. You are greatly to be complimented on that. It should be a source of satisfaction for the Superintendents and Operators to get together and improve conditions.



IT seems to me that we have only one reason for our existence. That is to store our surplus grain; but it is true that besides doing that, we do many other things. However, if there was not that annual surplus, we would not have these big elevators in Fort William, Port Arthur, and through the States.

If a wise Providence could arrange matters so that there would be a continuous flow of wheat, just sufficient for flour

demands, there would be no excuse for terminal elevators. As it is, there has been built up in Canada and the United States an industry for taking care of that surplus of grain. We have seen, since the war, that industry growing up and flourishing, and there has been constructed in the United States and Canada a great amount of grain storage.

I have another reason for mentioning this, in connection with the Trade Commission's report, because it so happened that the terminal elevator business reached a peak just at the time that all other industries were suffering from the depression. The production of those surpluses partly came about through governmental acts; for instance, the Pools in Canada, holding back as they did the grain which had been grown;— vast amounts were stored in elevators. Whether we agree with the Pool practice, or the Federal Farm Board provisions or not, these regulations forced into the elevators an immense amount of grain. That was the reason we prospered at the time when all other industries were suffering. I am calling your attention to this at this time because the Federal Report covers the period of highest prosperity in the terminal elevator business.

Terminal Elevator Industry Blameless

This particular report of the Federal Trade Commission covers a number of agricultural products but I will talk about our own product—wheat. It not only covers our part of the industry, but also flour mills, bakers, and a lot of other factors dealing with the transportation and distribution of wheat and wheat products, from the farm to the table. Recently there appeared in a syndicated column

words to the effect that this Federal Commission Report had been partly suppressed, and that if the Commission's report had been published in full, the lid would have been blown off the agricultural industry.

I think I can say to you that if they are trying to apply this to the terminal elevator industry, we are blameless. As far as I know, there is nothing in the complete record that reflects on the terminal elevator industry than was expressed in the short report which was published.

The F.T.C. Report

This report was the result of Public Resolution Number 61, 74th Congress; approved August 27, 1935. It follows:

OBJECT: To Investigate and Report:

- (1) On the extent of the decline in agricultural income in recent years;
 - (2) On the increase or decrease in the income during the same years of principal corporations or other sellers or processors of farm products or products thereof;
 - (3) The distribution of the consumer's dollar paid for such products, between farmer, processor and distributor;
 - (4) Growth of assets of such middlemen, and their costs, profits, etc.;
 - (5) Avoidance of taxes by such middlemen;
 - (6) The extent and method, if any, of monopoly and control in handling such commodities;
 - (7) The prevalence of crop associations and their affect on producer and consumer;
- The investigation covered wheat, cotton, tobacco, livestock, and milk. The following are statements which are of direct interest to us:

- (1) The lowest point reached by farmer's wheat income was \$205,000,000.00

DEBITS

1 White Elephant	\$0000
97,641 Weevilly Wheat	\$0000
68,253 Bin Burned Flax	\$0000
34,117 Musty Rye	\$0000
83,606 Mouldy Barley	\$0000
20,359 Wet Kafir	\$0000
57,575 Mahogany Corn	\$0000
76,543 Heating Oats	\$0000

CREDITS

1 Stewart Built Elevator	\$1,111,111
1,000,000 Bus. No. 1. Ad. N.W.	\$1,111,111
1,000,000 Bus. No. 1. Y.C.	\$1,111,111
1,000,000 Bus. Fancy Oats	\$1,111,111
1,000,000 Choice Maltng Barley	\$1,111,111
500,000 Bus. No. 1. Rye	\$1,111,111

BALANCE?

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Vice President

in 1932, which was 29% of 1929 income.

(2) As to income or profits of wheat handlers or processors, the general statement as to all middlemen handling the five commodities is that the gross income (sales in dollars) of principal middlemen fell less and recovered to a greater extent than did the gross income of the producers.

(3) Distribution of wheat dollars: In 1935 flour sold in fifty-one cities at an average of \$5.10 per barrel. Of this the:

Farmer received about.....	35%
Miller received about.....	22%
Wholesale and Retail distributor.....	33%
Wheat Middlemen & Transportation	
Agencies	10%
	100%

Distribution of bread dollar: consumers in fifty-one cities paid an average of 8.3c per pound for bread during 1935 and of this the:

Farmer received about.....	13%
Bakers received about.....	56%
Retail Distributors	19%
Millers received about.....	7%
Wheat Middlemen & Transportation	
	100%

There was no comment in the report as to why the transportation costs and the amount received by the wheat middlemen are combined.

(4) Eleven principal flour millers earned in 1935 2.84% on sales and 8.61% on investment.

Four principal wholesale bakeries earned in 1935 3.95% on sales and 4.87% on investment.

No report was made on the wheat middlemen's profits.

From 1914 to 1935 total capitalization of middlemen increased as follows:

Wheat middlemen	201%
Wholesale Grocers	92%
Tobacco Chain Stores.....	818%
Grocery Chain Stores.....	3016%

From 1928 to 1935 increases of capitalization as follows:

Wheat Processors	17%
Wheat Middlemen	24%

Rates of return (earnings) 1929-1935:

Wheat Processors	7.76%
Wholesale Flour Distributors.....	9.61%
Wheat Middlemen	10.59%

(5) No tax avoidance.

Elevator Figures Mysteriously Missing

Looking at it from any angle, I think it is very plain that if the Federal Trade Commission had segregated the amount received by the wheat middlemen from the item of transportation costs, the wheat middlemen's share of the farmer's dollar would have to be expressed in a fraction of a cent per bushel. That would not

have been a very good report for the Trade Commission to put as a basis for the recommendation which they make pertaining to the Terminal Elevator Industry. You must understand that they are merely inferences. The facts are that they do not show how much of the farmer's dollar the terminal elevators received. **The inference must be that the amount was small.**

In regard to the wheat middlemen's profits, I must say that they were reported. We spent weeks preparing figures for this report. I am surprised to see that no report is made on the many items covered by our reports, or else combined with transportation costs.

Evasion of taxes by such middlemen: The report shows no such evasions.

Who Handles What

(6) Monopoly and Control: In their fiscal year of 1934-1935, coinciding very closely with the crop year, the thirteen principal flour milling companies reporting to the Commission purchased a quantity of wheat which equalled 43.6% of the total crop and 65.2% of the commercial crop of 1934. Purchases of the three largest reporting companies represented, in the same crop year, 25.7% of the total and 38.4% of the commercial crop of 1934.

General Mills, Inc., was the outstanding largest buyer, its purchases in the crop year of 1935 being equal to 15.59% of the total crop and 23.5% of the commercial crop, or more than twice the volume reported by either of the two other largest purchasers, Pillsbury Flour Mills Co., and the Colorado Milling & Elevator Co.

The extent of control indicated by purchases in relation to the crop are substantially lower for wheat and livestock than for the above mentioned wheat products. Fifteen principal wheat middlemen handled in one year a volume equal to 16.4% of the 1934 total crop, or 24.5% of the commercial crop of that year; but the three largest of these middlemen reported purchases equal to only 8.8% and 13.1% of the total and commercial crop respectively.

(7) Co-operatives: Co-operative associations apparently have achieved better results in the marketing of perishables and other products that require movement from the farm to the terminal market or to the point of consumption within a limited period of time. In handling of products that may be stored and marketed as needed, the association benefits to the producer, measured in prices ob-

tained and savings made for him, are not quite so clear.

F.T.C. Recommendation

"In its two investigations of terminal grain markets years ago, the Federal Trade Commission found that the control of railroad-owned terminal elevators leased by large merchandisers of grain at low rentals was one of the principal factors which gave to such lessees an undue competitive advantage over other grain merchants in the purchase and handling of grain, with the result that such large merchandisers practically dominated both the cash and the futures markets at the principal terminal points. . . .

"A possible remedy for the existing situation is to make it practicable for grain dealers not operating elevators to store grain in public elevators in competition with the big elevator merchandisers, and that the railroads might be required to operate elevators for the convenience of their shippers. . . ."

Now, I happened to have had considerable experience in the leasing of terminal elevators from railroads during the past twenty-five years. Twenty-five years ago I was in Omaha. Our principal competitor was Kansas City. One hundred per cent of the elevators in Omaha were privately owned. A large percentage of the elevators at Kansas City were leased to our competitors. We thought at that time that they had an undue advantage and that it was impossible for us at Omaha, owning our plants, to compete with the leased elevators in Kansas City.

As a result, we instituted proceedings before the Interstate Commerce Commission, attacking these leases. The leases were all produced in court. The railroads stated their cases and the Kansas City elevators argued theirs, but the Commission found in our favor. The Commission found their rental to be too low and laid down forms for future leasing of railroad terminal elevators, which was six per cent of the depreciated value per annum.

In order to carry out the findings of the Commission, appraisers were appointed, approved by the court. They determined what it would cost to replace these elevators, depreciated them for age, and also allowed for obsolescence. As a result of the use of that form, as far as I know, no new elevator has been constructed and leased to any terminal elevator company on any cheaper basis than six per cent of cost, with the exception of one railroad which wishes to lease an

(Concluded on Page 15)

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LITTLE ECONOMIES *to Remember*

by PERCY C. POULTON

N. M. Paterson & Company, Ltd., Fort William, Ont.

Before Eighth Annual Convention of the SOGESONA

Economy in Power Usage

Power and its application in a grain elevator is one item where economy can be practised.

It has been said in this part of the country that electrical power is the cheapest commodity an elevator uses. That is a correct statement when an elevator is a very busy plant; but when it is considered that power contracts are based on a 24 hour demand service, and the use of that service represents only an eight hour day, for approximately eight months in the year, as has been the case in these districts for the past few years, then it cannot be said to be cheap. It becomes cheap only when a plant has sufficient work to do to cause a high rate of consumption after the cheap power bracket has been reached.

This line of reasoning brings to mind the thought that an elevator should operate on a peak load as low as is possible, enabling the cheap power bracket to be reached as early as possible in the month's operation. To further that point it might be well to quote the power rates currently in force in these districts, which are as follows:

Service charge: \$1.00 per horse power per month, based on a plant's contracted peak;

Plus 1.6 cents and .9 cents for the first and second 50 hours use of the maximum demand, respectively, and 1/10th of a cent for kilowatt hours consumed after that.

Therefore, the demand peak should be kept as low as is consistent with the full mobility of a plant if you would obtain power at the cheapest cost possible.

Favor Receiving End

In recent years the tendency of new elevator construction has been towards

the installation of shipping facilities—conveyor belts and shipping legs—of large capacity, 25,000 bushels per hour and upwards. Do grain elevators require to have shipping units of such large capacities? From the standpoint of economy of power, the contention is, "No!" for reasons this paper will endeavor to show.

Shipping legs of 25,000 bushels per hour require 175 horse power to drive them. Using a two leg house as our basis for argument, it is seen that 350 horse-power is required to drive two such legs, against the power rating of 200 horse power required for two legs of 15,000 bushels per hour capacity. This means a saving of 150 horse power or \$150.00 per month, \$1,800.00 per year, using local power rates in making this comparison. It follows as a natural corollary that each and every conveyor belt feeding such high capacity legs must be capable of supplying the leg lifting capacity, therefore, increased power is required from bin bottom to shipping garner.

On account of the fact that there is so little labor expended in connection with the work of shipping grain, it is difficult to see where the capital costs of first installation of such equipment, plus the additional power costs, is warranted by any corresponding saving of labor to off-set these charges. With high rates of shipping capacity in an elevator's facilities, more than 60% of its peak demand is given over to that end of the operation, which type of work is not by any means continuous. If we must have fast legs and fast belts let us have them where the higher costs of installation and operation can be off-set by a corresponding economy of labor costs—THE RECEIVING END.

In planning new constructions, it should also be well to bear in mind the economy of the individual drive in power and in maintenance costs. The individual drive also gives a greater degree of flexibility to a plant in regard to its power control; in other words, a plant equipped with individual drives can operate on a lower peak in quiet times.

Electrical Equipment and Oil Savings

Before commencing to discuss this portion of my paper, I shall take the liberty to read to you a memorandum issued by the Electrical Apparatus Committee, of the National Electric Light Association, entitled "Importance of Maintenance and Inspection."

Quote. "Central stations and other large users of transformers, oil circuit breakers, electrolytic lighting arresters, and feeder regulators have become more and more convinced of the necessity for making periodical inspection and tests of insulating oil and of dehydrating and purifying oil that has absorbed moisture or sediment. Where this practice has been systematically followed, it has been found that failure of apparatus from burnouts, with consequent interruption of service, has been reduced to a minimum and a resulting economy in the use of oil has been effected. Notwithstanding the fact that many central stations carefully inspect the oil in their apparatus, it is believed that the importance of this subject justifies the recommendation that all companies, in the interest of good service, adopt some system of oil inspection." Unquote.

Transformers even when located in the cleanest of places will absorb sludge and gather moisture in their insulating oils. Sludge and moisture when present in a transformer's oil form a very dangerous combination, one very detrimental to the proper functioning of the oil, and should certainly be removed once yearly. I wonder if any of us give enough thought to our transformers and realize their importance and how disastrous it would be to our plants if we should lose them when we are real busy. Therefore, for the sake of peace of mind and absolute economy, all oils in transformers should be put through a filtration process annually.

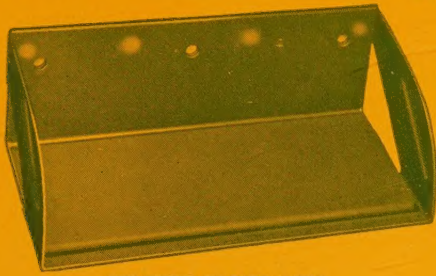
Filtration of oils in use in transformers is to be preferred to a new supply of oil because, apart from the absolute economy of filtration, there can be positive assurance that new transformer oil would be entirely free of moisture, due



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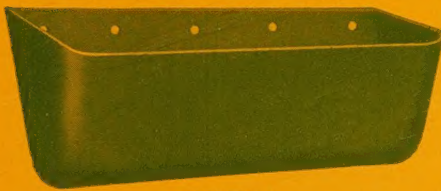
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CALUMET



HAMMOND "D P"
Hammond "O.K." also manufactured.



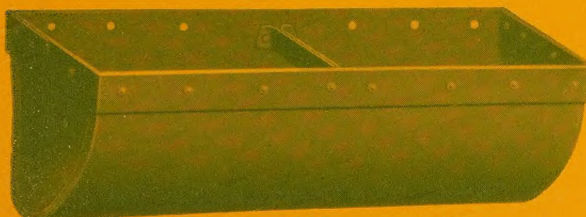
SALEM



MINNEAPOLIS "V"



RIALTO



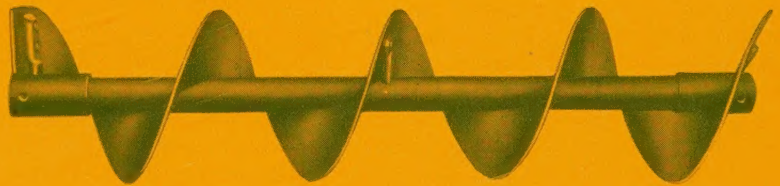
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ELEVATOR BUCKETS

to its possible entrance, from condensation, into the oil, between the time it was placed in metal containers at the refinery and the time it was delivered for use. The matter of filtration of transformer oils and oils of other electrical apparatus becomes doubly important in cases where such apparatus has been laid up or has remained idle for a considerable time.

Care of Motors and Starters

It has been proven to be good practice to completely dismantle all electrical motors once yearly for a complete over-haul and check. The coil windings, rotor bars, shaft and bearings can thus be thoroughly cleaned and examined so much more satisfactorily while a motor is in a dismantled state. If at the time of dismantling it is found necessary to re-babbitt a motor's bearings, it is the most propitious time to have it done, because, as the job of over-hauling motors can only be done in dull times, the occasion gives sufficient time to properly run in the new bearings, a feature which is important in the life of any bearing. In the majority of cases, motor failures, (and they only occur at times when a motor is most needed,) are caused by worn bearings. Therefore, if you would avoid motor failures, clean them thoroughly once yearly and check for bearing wear often.

At the time of dismantling, all old oils should be drained and all sludge and foreign matter very thoroughly removed from bearing wells before replenishing with clean oil. The oil taken from bearings can be saved, to be later filtered and made fit for further use. Rags should always be used in cleaning motor bearings, or any other type of bearings, NEVER, cotton waste. Before a motor is re-assembled, its coils should be thoroughly cleaned and a protective coating of some recommended product for that job should be applied to the coil windings to protect them from atmospheric and dust deteriorations.

It is also a good practice to thoroughly clean out the oil wells of starters once yearly at least to make them free of sludge and moisture. This is especially important in the case of hand-starters because the oil wells of that type of starter are so shallow and the contacts so close to the well bottom, it is positively dangerous to have sludge and moisture present in them. Line starters, too, should have their wells cleaned once yearly, and all contacts, etc., thoroughly gone over. Old oil taken from all start-

ers, can also be saved to be later filtered and made fit for further use.

Filtration of Old Oil

All oils removed from motor bearings and motor starters can be filtered, made free of all sludge and moisture, and absolutely fit for further use, with only a very slight shrinkage in quantity, by filtering it through an electric filter. Such filters are of the blotter under pressure type and can be purchased in various sizes of capacities. One, giving a capacity of 300 gallons per hour, costs about \$660.00 in Canada. I do not know of an elevator in these parts, possessing one.

All of this brings to my mind an idea I would like to suggest to each Chapter of our Society, but especially to our own in Fort William and Fort Arthur, because I feel sure it expresses a real need here. Inasmuch as the oil filtration of the electrical equipment of the average sized elevator plant can be accomplished in two or three days, it would be nothing short of economic waste for each elevator plant to equip itself with a filtering machine. Nevertheless, I do feel it is very essential that each and every plant should have access to the use of one. For that reason, I would like to see steps taken by each Chapter of this Society to make a survey of its district to ascertain if the various plant managements would consider the idea of entering into a joint ownership plan of such a piece of equipment.

The filter machine I have in mind is readily portable so there would be no difficulties met with in connection with its transportation from one plant to another as needed. The next plant requiring to use it would be responsible for the cost of moving it to its own premises only. Of course, the blotters used by each elevator, and they are very cheap, would be the responsibility of each elevator.

Motor and starter care, and oil filtration, as outlined in this paper, will make for better and more service from such equipment, PLUS PEACE OF MIND, PLUS ECONOMY.

Monitor Separator Maintenance

Everyone has had experience with Monitor Separators and the parts of that machine which are prone to wear, the brush carrier shafts and the brush carrier hubs. The wearing of the brush carrier hub is really the crux of all brush carrier trouble. It becomes worn and throws the yokes out of correct alignment, thereby causing them to cut the

points of the groovings of the expensive shaft of this equipment. It is a good practice, if you would economize on this machine, to examine the brush carrier parts before and after continuous heavy service.

The old installation of the brush carrier parts previously came in one complete, indivisible part and when the hub showed wear, it could either be built up by welding and machining to shaft size, or a complete replacement of the part could be made. Today it is possible to buy at attractive prices brush carrier arms for the Monitor Separator which comes in knock-down form. Hence, when the brush carrier hub shows wear and the yokes begin to cut the shaft groovings, the hub only can be replaced and at only minor cost, insuring first class brush carrier performance.

Welding has become such a science in recent years, it is no longer necessary to discard worn brush carrier shafts of this type of cleaner. The expert welder can now weld the worn grooves and make the shaft serviceable for much further use, and at very small cost, thus avoiding the much heavier cost of replacement.

Elevator Stores

Now we come to the concluding item of my paper, "LITTLE ECONOMIES TO REMEMBER", and it concerns a part of elevator operation which provides an unending and unlimited scope of real economy, the safeguarding and proper care of an elevator's stores against pilferage and losses through carelessness.

The many items of elevator stores, such as ropes, cables, paints, window lights, electric lamps, brooms, oils, greases, and those tools which are only seldom used, etc., etc., require constant and careful supervision if you would avoid losses and be able to find, at once, everything an elevator owns, when needed. There is only one way to accomplish this and that is by organizing a store-room in charge of one man who is to be held strictly responsible for everything in his care. In other words, one man on the plant whose job it is to safeguard those things which are purchased for plant maintenance.

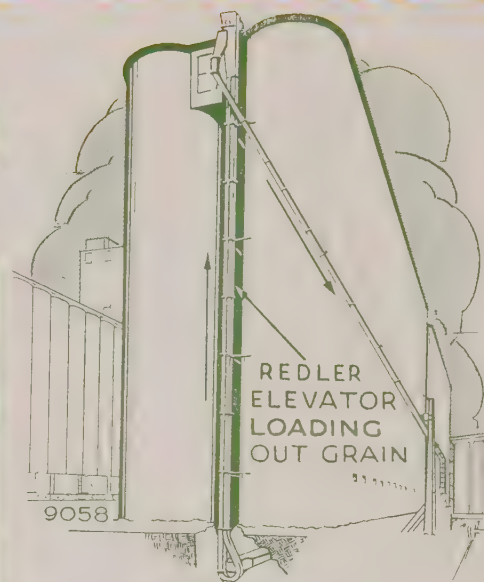
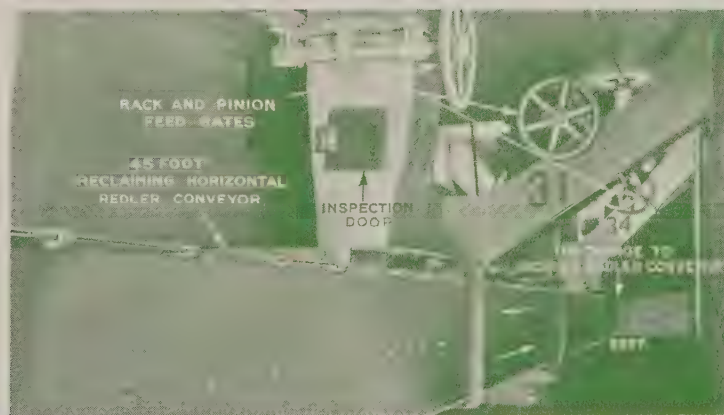
A properly constructed store-room should be provided with a split door over which articles of stores can be handed out, and no one should be allowed to enter the store-room excepting the man placed in charge of it. The store-keeper can keep an up-to-date inventory of all elevator stores, keep a thorough

(Concluded on Page 15)

PREVENT FIRE AND EXPLOSION!

— Decrease Insurance Rates —

USE REDLER *Conveyor • Elevators*



REDLERS CAN BE QUICKLY AND EASILY INSTALLED—The Redler elevator shown above was rushed into this elevator to load out grain after the work house had been destroyed by fire. Redlers are dust, weather and explosion proof.

Redlers will carry horizontally, vertically and even around bends, and one unit will often do the work of two or more ordinary conveyors—eliminating trippers and unnecessary transfer points.

UPPER LEFT—Redler conveyor distributing grain to storage tanks—without dust or danger. Grain is conveyed in large volumes and can be discharged into any tank.

LOWER LEFT—Another Redler conveyor used in the same elevator to reclaim from various storage tanks.

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1. "Redler Conveyors should be used wherever possible—they eliminate dust, prevent explosions and fires, and the enclosed casing retards the progress of fires from other sources."

(One Minneapolis mill was refused insurance until Redler conveyors were installed between elevator and mill.)

2. "Grain is handled gently and without breakage. Redler elevators can be discharged at any level—thus the grain need not be elevated above the level necessary for the operation involved."

(Power saving often approaches 40% on such operations as turning and cleaning.)

LET S-A ENGINEERS SHOW YOU THE ADVANTAGES OF REDLER CONVEYORS

AFTER THE ELEVATORS FINISH



by V. L. CHAMPLIN

General Superintendent

Archer-Daniels-Midland Company, Minneapolis



● Certain branches of the oil milling industry are rather closely related to the grain elevator industry since their commodities are handled by the terminal houses. This is especially true of flax and soybeans. Possibly some grain elevator superintendents who handle



V. L. CHAMPLIN

these commodities regularly have had no opportunity of becoming familiar with the processes these raw materials pass through after they leave their hands. With the thought that an explanation of oil milling processes might be of general interest, a brief description is here presented covering the processing of flax and soybeans.



FLAXSEED, which is grown extensively in the northwest section of the U. S., normally contains from 36% to 40% Linseed Oil. Due to adverse crop conditions in recent years, the production of flaxseed has been insufficient for domestic requirements, and as a result, large quantities of the product have been imported from foreign lands, chiefly Argentina, India and China.

In milling flaxseed, the first process through which it is put is the cleaning operation. This primary step is of most importance. Commercial flaxseed varies considerably, both regarding kind and quantity of dockage. In order to produce a high quality oil it is vitally necessary to remove the maximum amount of oil-bearing dockage. The oil derived from this dockage considerably lowers the standard of Linseed Oil. Mustard, rape seed, etc., are among the dockage of this class. Probably the worst offender is the thistle seed, found abundantly in the northwest, whose presence in the flax causes a distinctly greenish cast to the processed oil.

Certain non-oleaginous types of dockage are highly pigmented and failure to remove them from the seed before processing will produce an oil very much discolored.

Conventional types of cleaning equipment are used for cleaning flaxseed prior to processing. That is, the lighter material is removed by aspiration. The coarser material, such as oats, barley and corn, is removed by scalping operation and the finer screenings which contain most of the objectionable oil-bearing products are removed by round-hole sand screens, small enough to effect a separation of the flaxseed from the smaller sized material. With sieve machines it is impossible to clean flaxseed down to less than three per cent dockage, but the disc and cylinder machines carries the final assay down to one per cent or lower.

Following the cleaning process, the dockage-free flaxseed next goes through a grinding process. The purpose of this is to reduce the flaxseed to fine particles necessary for the extraction of the precious oil. For this, vertical stands of smooth rolls are employed. These are usually about 14 inches in diameter and approximately 48 inches long. Scraper arrangements provided on each roll serve the purpose of keeping the surface of the rolls clean.

The standard and most common method of removing Linseed Oil from flaxseed is by means of the hydraulic press. About twenty years ago, attempts were made to remove the oil by solvent extraction. At that time, great difficulty was encountered in the complete removal of the solvent from the meal, and, as a result of prejudice by feeders of solvent-extracted meal, this process was discontinued. The old hydraulic method remains to present the accepted mode.

In a hydraulic press mill the ground flaxseed is first conducted to a linseed cooker. This is a steam-jacketed equipment consisting of two or more horizontal compartments with a common ver-

tical shaft to provide agitation. The freshly ground flaxseed enters the cooker at the top, is heated and tempered, and then drawn out the bottom where it is moulded into oblong cakes approximately 15 inches wide, 36 inches long and 1½ inches thick. These cakes are wrapped in press mats to facilitate drainage and are placed in the hydraulic press. This press usually has 24 compartments, each compartment just large enough to receive a cake after it is wrapped in the mat. When the press has been filled, hydraulic pressure is applied. This pressure is automatically increased until a pre-determined pressure of approximately 4,000 pounds per square inch is exerted. The operation requires about one hour. The cakes are then taken from the press, the mats removed, and the outside edges, which are invariably oily, trimmed off by a machine especially designed for this purpose. The finished cake, containing about 5% oil, is the commercial Linseed Oil Cake. For domestic use, this is usually ground into a meal and marketed as Linseed Oil Meal. This meal contains approximately 40% protein and is highly regarded as a feeder concentrate.

The Linseed Oil removed from the presses carries with it varying quantities of fine meal. This is removed by filtration and the clarified product is Raw Linseed Oil. Linseed Oil is a drying oil; that is, it will change from a liquid to a solid state by oxidation and it is valuable in the paint, varnish, linoleum, printing ink, and allied industries. If spread out on a thin film it will require a drying time of approximately three days. In order to speed this drying process up, the Raw Linseed Oil is converted into Boiled Linseed Oil. In addition to Boiled Linseed Oil, a great number of various specially refined linseed oils are produced to meet the exacting demands of the industries. The processes involved in producing these oils are as varied as the products.

Because of competitive conditions generally, the Linseed Oil manufacturer finds



T. C. MANNING
of Uhlman Grain Co.,
President K. C. Chap.



HOLLIS GRAVES
of Capitol Elevator
Co., Prominent Duluth
Superintendent



E. G. R. PETERSON
of B. A. Eckhart Mill-
ing Co., Well-Known
Chicago Super



R. B. POW
Reliance Grain Com-
pany, Ltd., Popular
Convention Figure
and a former Mayor
of Fort William

it imperative to remove the maximum oil possible from the flaxseed. While the hydraulic process has not changed in principal for many years, there have been constant refinements in the process to better the oil yield. It has been found that best results are obtained in continual-process, so the average Linseed Oil manufacturer operates his plant on a twenty-four hour basis, using three eight-hour shifts for a day's operation.

The processing of soybeans follows a close parallel to flaxseed. Compared, though, to the processing of flaxseed, soybeans, despite its roots in antiquity, is a new-comer to the processing field. Soybeans flourished in the Far East long before wheat and corn became staple crops. The first recorded history of the soybean dates back to thousands of years before the Christian Era. But it is only in the past few years that soybeans have entered the commercial field. For countless ages the soybean was treated as purely a food utility but American chemists have amply demonstrated that the commercial field for soybean by-products is unlimited.

In the United States, the production of soybeans is centered in the corn belt but is rapidly spreading. Each succeeding year finds a greater crop area harvested as the increasing importance of the commodity is appreciated. On the Chicago Board of Trade, soybeans lead the field in price. They are sold on the basis of federal grade. The amount of dockage in soybeans averages very much less than the dockage in the average flaxseed. Combines are used almost exclusively to harvest the legumes and that may be the reason for the difference. Terminal elevators handling soybeans in volume report no difficulty in either storing or treating and one house showed a shrinkage on a season's carryover of 800,000 bushels of less than one-half of one per cent.

The soybean contains approximately 19 per cent oil and after extracting this, the resulting soybean meal contains in excess of 40 per cent protein. This makes it a very valuable concentrate for feeding purposes. Whereas, in the linseed industry most of the production is done with hydraulic presses, we find that in the soybean industry there are three different processes for extracting oil from the bean. First, the original expeller method in use since soybean milling began in America. In this process, the soybeans are first ground to the fineness of coarse cornmeal and put through a drying operation to bring the moisture content down to about three per cent, which puts it in proper condition for the expeller operation.

MILLIONS

of dollars go up in smoke every year—just because of

DUST EXPLOSIONS

Terminal elevators throughout the country are protecting elevator legs from dust explosion hazards with

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The expeller itself is a mechanical press consisting of a horizontal worm encased in a steel barrel. After heating and tempering, the hot material is fed into the expeller proper and conveyed through the barrel by the worm. A choke arrangement is provided at the discharge end which results in developing sufficient pressure inside the barrel to force out the oil. This oil is removed through drainage openings and contains a considerable proportion of fine meal particles which are then removed by filtration. The expeller cake is discharged in the form of thin chips. These are ground and marketed as Soybean Oil Meal.

Method number two is the hydraulic process. This corresponds very closely with the hydraulic method used in the linseed industry, with the exception of minor changes necessary for the different commodity. In both the expeller and the hydraulic processes, the amount of oil left in the meal averages approximately five per cent. It depends upon the plant. Some run much higher than that.

The third and latest method of processing soybeans in this country is the German-developed solvent extraction process. Compared with the expeller and the hydraulic methods, this is by far the most efficient, since the oil content remaining in the meal averages but a scant one per cent. In this process, the soybeans are first dried, rolled to flakes and then treated with a solvent. This solvent puts the oil in solution and the liquid is then drained off. The remaining meal, with its residual solvent content, is then placed in driers which completely remove all traces of the solvent. The meal, which now meets the rigid standards of the pure food laws, is ready for market. Commercially it is known as New Process Soybean Oil Meal. The oil is obtained by distilling the liquid mixture of oil and solvent, the solvent, being volatile, distills from the oil and is returned to storage tanks for further use.

The first commercial solvent extraction unit installed in this country was manufactured in Germany and placed in operation in 1934. Since then, there has been constant improvement, chiefly in increased efficiency—less time and cheaper costs. Because of the greater economy of this method, it is safe to say that eventually it will displace the older processes.

Soybean oil, beginning with a limited field in the industrial world, now commands a position of highest importance. Soybean meal ranks equally high. And daily the laboratory finds new uses for this miraculous new-comer to American agriculture.



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Minneapolis



GEORGE STINGEL
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PERCY McCALLUM
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of Rosenbaum
Brothers, Chicago



E. H. KARP
Farm Credit Admin-
istration, Chicago



S. S. ORSTAD
Federal Grain, Ltd.,
Fort William (above)
and R. B. DOW
(Page 13) went to
Toronto to Fight Pro-
posed Demurrage
Changes



GODFREY MORGAN
Spencer Kellogg &
Sons, Buffalo



EMIL BUELENS
Chicago Chapter
Secretary

THE ELEVATOR SITUATION —

(Continued from Page 6)

elevator for five per cent per annum if the operator pays the taxes. I think I would know if any elevators have been leased for less than that.

Government "Coordination"

There is just now being completed in Kansas City a three million bushel elevator, constructed by local authority there with Federal funds, and is to be leased to an operating company on this six per cent basis. Every lease made since those early days has either had the actual or tentative approval of the Interstate Commerce Commission. On a small elevator they might not have specific approval.

We have three agencies of the Federal Government: The Interstate Commerce Commission, setting the fee for rentals; the Financing Board advancing money for construction; and the Federal Trade Commission stating that in many cases the elevators are leased at rentals which are inadequate. It seems that there is a lack of coordination between the governmental agencies.

I would like to call to your attention the fact that as a result of the Federal Trade Commission investigation, they were unable to develop any new facts or any new conditions, and the only recommendations they made, as far as we know, are those which were contained in their report of twenty years ago. In other words, I think it is safe to say that the Federal Trade Commission Report of 1935 gave the terminal elevator industry a clean bill of health.



LITTLE ECONOMIES —

(Continued from Page 10)

check on all tools and be made absolutely responsible for the safe return of all returnable articles which are issued out of stores for use in the plant.

An old sailor makes an ideal store-keeper. His experience has taught him the proper care of tools. He is able to splice both manila and wire ropes, repair car shovels, and do numerous other odd jobs. In addition to the above work, he can be made into a day-watchman, requiring him to make daily visits to all parts of the building which, in quiet times, might not otherwise be visited.

The time and effort expended to get an efficient system of store-keeping functioning in an elevator plant will pay good dividends and is recommended.



The Blencoe Farmers Elevator turned its weighing service for cross-country trucks into a very profitable sideline by installing a 20-ton Fairbanks Type "S" Printomatic scale. Drivers and trucking companies learned that this Printomatic not only gave absolutely accurate weights but supplied a plainly printed ticket which forestalled any arguments. Business increased 25%.

Designed for heavy truck weighing, the Fairbanks Type "S" will accommodate the longest load. The latest developments of the world's oldest and largest builder of scales are incorporated . . . accuracy is beyond question . . . and the Printomatic bars arguments and eliminates errors.

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THE Superintendents

THE old country Elevator is about as familiar to almost everyone as the old country schoolhouse. Crude as they both seem today they both nevertheless served their purpose in a good old-fashioned way.

It was in one of these familiar country Elevators that Arvid Anderson, Superintendent, Crowell Elevator, Omaha, Nebraska, began his career in the grain business. In 1900 he started in what was then considered, "a very modern Elevator." It was a cribbed house boasting of a "nigger-head" car puller, and open for business seven



ARVID ANDERSON

days a week. The day's work began when the men arrived in the morning — and the men left at night when the day's work was over. There was none of the labor-saving machines of today. Bone and sinew had not then been replaced by steel and cable. A really busy day saw Mr. Anderson unloading as many as a hundred wagons and loading as high as **FOUR** cars.

Winter with its ice, snow and extremely cold weather presented almost unsurmountable difficulties in the country Elevator. Often Mr. Anderson plodded his way through waist-high snow in a stiff, sub-zero wind to reach the Elevator at 4:00 A. M. and there to stubbornly fight a cold, balky gasoline engine into life. However, all these frigid inconveniences faded before the delightful pleasure of working in a country Elevator when the soft breezes of spring and summer and fall murmured the song of the grainlands.

In 1905, the Crowell Elevator Company began construction of a terminal Elevator at Omaha, Nebraska, and Arvid Anderson was chosen Superintendent. He was right on the job from the time ground was broken and this intimate knowledge of the plant minimized the difficulty of the step between a small country house and a large terminal Elevator. At that time, the Omaha Grain Exchange had been in existence only a year or two and the inspectors graded all grain in the railroad yards. There was no laboratory inspection. In grading corn, for instance, the inspectors would merely run their hands through the sample sack and grade it on moisture content according to the way it felt to their hands. Wheat and oats were weighed in a test measure and an ordinary lead pencil, if one was handy, served as stoker.

Superintendent Anderson recalls those days with a chuckle. "It wasn't so difficult loading out grain to grade in those days. . . . Maybe that's how a lot of us Superintendents got by!" he smiled, and then, seriously, "I can well remember when the Government commenced supervision. It was the prevailing opinion that we were in for a great deal of trouble,



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I Know Something Good About You

By Burr McIntosh

*Wouldn't this old world be better
If the folks we meet would say,
"I know something good about you!"
And then treat us just that way?
Wouldn't it be fine and dandy,
If each handclasp warm and true
Carried with it this assurance,
"I know something good about you!"
Wouldn't life be lots more happy,
If the good that's in us all
Were the only thing about us
That folks bothered to recall?
Wouldn't life be lots more happy,
If we praised the good we see?—
For there's such a lot of goodness
In the worst of you and me.
Wouldn't it be nice to practice
That fine way of thinking, too?—
You know something good about me!
"I know something good about you!"*

but we certainly were wrong. And today we would not want to do business without them."

In 1928 there was constructed for the Crowell Elevator the most modern terminal Elevator in the country. All the latest machinery and devices for handling grain efficiently and expeditiously were incorporated in the new plant. Once again Mr. Anderson was on the job. From the sinking of the first piling to the installation of the last machine he supervised it all and then moved in and demonstrated what a fine team a modern terminal Elevator and a first class Superintendent make.

Arvid Anderson, thirty-six years in the grain business with the same firm has attained a successful life. His acceptance of new ideas and efficient methods eliminate stagnation. The Society of Grain Elevator Superintendents knows him well as its First Vice President in 1933 and as an energetic director. His articles in GRAIN have displayed his keen insight of practical grain handling. In looking back

over his career, Superintendent Anderson says: "All branches of industry have made progress the last few decades, some perhaps more than others, but when one considers the contrast between the humble, old-fashioned country Elevator and the mammoth, efficient terminal Elevator, one must concede that no industry has made greater progress than the grain business."

★

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THAT WE ARE BORN TO LABOR—
THE ONLY TRUE CONTENTMENT IS TO BE
HAD IN HARD WORK WELL DONE

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Super News

CHAPTER MEETINGS SCHEDULED

Minnesota Chapter at Minneapolis, September 28 and October 26.

Kansas City District Chapter during National Safety Congress, October 14.

Chicago District Chapter, tentative, October 5.

Buffalo District Chapter, tentative, October 11.

Fort William-Port Arthur Chapter, tentative, November 18.

ON YOUR CALENDAR

October 11-12, Grain & Feed Dealers National Association, Baker Hotel, Dallas, Texas.

October 11-15, National Safety Congress, Auditorium, Kansas City, Mo.

March 27-30, Society of Grain Elevator Superintendents of North America, Kansas City, Mo.

May 9-13, National Fire Protection Association, Atlantic City, N. J.

LISTEN, OSCAR OLSEN!

By Henry Korn

Oscar Olsen of Duluth brought up at the SGES Convention the advisability of developing an inexpensive car dump for slower, older houses. According to our calculations the boys in Buffalo have figured it out that the monetary savings in four years PAY for a dumper, — not to mention the savings on the men's exertions, which in these days when shovellers are scarce, is AN item.



Here's to The Elevator Man

Here's to the man in the Elevator!

Let others write books glorifying the man in the mines; let Hollywood capture in celluloid the man bespattered with newspaper ink; I sing of the dust-coated man in the Elevator!

An honest, husky man is he, equipped by Nature with abundant sinews for accomplishing the great task of handling her yield of mountains of grain.

A forthright man, he labors unsung in the dusty caverns of his calling supplying the world with food.

An honest man, he guards his charge from infection and disease for the sake of those who eat.

A rugged man, his dust-caked sweat bespeaks his brawn.

An essential man, without his product mankind dies.

A great man — THE ELEVATOR MAN!



● Canada had a little slump in Spring Wheat this year but did you ever see the Land of the Maple Leaf lower the flag? Watch for her next crop!

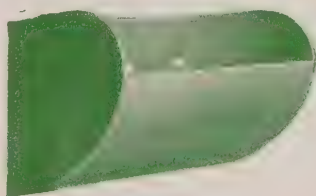
● The makers of aspirin and effervescent salts would have gone broke at the S. O. G. E. S. N. A. Convention in Fort William-Port Arthur.

● When you apply for membership in the S. O. G. E. S. N. A. you don't BUY anything — you HIRE the cream of the grain crop to help YOU.

● There is no problem confronting a terminal elevator that can not be immediately straightened out by sending a letter to SOCIETY OF GRAIN ELEVATOR SUPERINTENDENTS OF NORTH AMERICA, 332 S. La Salle Street, Chicago, Illinois.

How Many A-C-C-I-D-E-N-T-S have you had this month?

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is a highly specialized elevator bucket and to get maximum results with greatly increased capacity, there is necessarily some engineering advice required as to its proper application. We are the ones to give it to you. Our regular dealers are trained in this. If you are not in touch with one of these dealers, a letter to us will put you straight.

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HAVE JOINT MEETING WITH MANAGERS; ELECT OFFICERS

"The Minneapolis Chapter superintendents recently held a joint meeting with their managers", writes Secretary E. J. Raether of Brooks Elevator Company, "and it went off grand."

B. A. Snarenberger of Fairbanks Morse & Company explained the operation of diesel engines and H. H. Van Ornum of Hart-Carter Company talked on conveyor belt friction and power, "and do those two boys know their stuff"

Jack Coughlin, superintendent of the Union Elevator, Brooks Elevator Company, was elevated to the post of Chapter Presidency; M. M. Noxon, Superintendent of Ralston-Purina Company, was made Vice President, and Secretary-Treasurer Raether was prevailed upon to accept another term in the office in which he has served so well.



E. J. RAETHER
Minneapolis
Chapter Secretary

Art Larson of Hallet & Carey gave our members a most stimulating address in concluding the evening's successful program.



NEW MINNEAPOLIS DIRECTORS

Lewis Fried, Spencer Kellogg & Sons; Pat Bohan, Searle Elevator Company; Paul Christensen, Monarch Elevator Company, and James M. Russell, Midwest Electric Company, were appointed Directors of the Minneapolis Chapter at an executive meeting just held. This is in addition to the three officers who are President Jack Coughlin, Brooks Elevator Company; Vice President M. M. Noxon, Ralston-Purina Company, and E. J. Raether, Brooks Elevator Company.

Director Paul Christensen becomes Chairman of the Membership Committee, and George A. Dunkelbeck, Monarch Elevator Company; Ray Brusseau, Atlantic Elevator Company; P. H. Wheeler, Van Dusen Harrington Company, and J. E. Bruzek, Sr., International Milling

Company, (New Prague) are committee-men.

Director Lewis Fried heads the Safety Committee aided by William B. Grogan, Fleischmann Malting Company; Ovie Christopherson, Archer-Daniels-Midland Company; James G. Hayhoe, Cargill, Inc., and Dan Whalen, Commander-Larabee Milling Company.

Director Pat Bohan is the new Chairman of the Entertainment Committee assisted by Hilmer Berg, Van Dusen Harrington Company; Paul Konopatzki, Bunge Elevator Corporation; H. H. Van Ornum, Hart-Carter Company, and L. W. Steere, W. S. Nott & Company.



C. B. WARKENTIN TO SPEAK

Mr. C. B. Warkentin, President of the Midland Flour Milling Company, Kansas City, Mo., has agreed to address the Food Section of the National Safety Congress on "What Accident Prevention Means to the Flour Milling Industry."

Some seven thousand safety engineers of the country will meet in Kansas City for this Congress during the week of October 11th, — the same first two days the Grain & Feed Dealers National Asso-

ciation meet at Dallas. Inasmuch as the Elevator Superintendents Association is an active member of the National Safety Council it is expected that quite a number of their members will attend this important affair, and the Kansas City Chapter is making preparations to hold joint meetings with the Food Section.— T. C. Manning, President, Kansas City Chapter, Wabash Elevator, Uhlmann Grain Co., North Kansas City, Mo.



WEEVIL-TRAP

By Jim Hayhoe

Some of the boys at our Omaha office recently had a lot of fun breaking in a "rookie" sending him out to borrow a "weevil-trap" from any of the other elevators. . . . All the other Supers fell right in line and apparently enjoyed the "initiation" as much as the perpetrators — each referring said "rookie" to an elevator further away. . . . Later sent him after a white and yellow corn separator. . . . Sounds like some of the gags of military school. . . . Too bad we couldn't work up an equally funny initiation for the SGES.

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THE RUSH IS MOVING NORTHWARD

The tidal wave of new crop grain harvesting is moving northward and according to E. B. Sutherland, Vice President of N. M. Paterson & Co., Ltd., Fort William, yields at many of their Manitoba stations are turning out **two to three** times as heavy as even the most optimistic forecasts of a month or so ago.

Minneapolis-Duluth-Superior elevators have so out-distanced that busy one-arm paper hanger that the boys up there won't

even answer their mail, let alone paying their dues.

Corn in many locations is approaching the all-time high production, so Nebraska's half-crop will probably be the only blight on the glistening picture, — and maybe their crop won't be so bad.

On the South end of the Continent wheat is now being **planted** to avoid Hessian fly, and so far acreage compares favorably with last year's plantings.

Cagey European buyers are cautious but playing a good poker hand, as usual,

and outsmarting the administration at every turn.

Summing it all up the trend has reversed itself and we're apparently in for a cycle of more plentiful crops — and legislation won't stop it.



KANSAS CITY CHAPTER MEETS

By R. E. Browne, Secretary

A second conference with the Managers of the Kansas City Elevators was held by the Kansas City District Chapter of the Society of Grain Elevator Superintendents on Thursday, September 9th, with our well-known Frank A. Theis, Honorary Member of the Association and President of Simonds - Shields - Lonsdale Grain Company, representing the Operators. Through the discussions the Chapter tried to assist in ironing out a knotty problem confronting the heads of our grain elevator firms.

In addition to other routine affairs, the Chapter voted to meet on the second Thursday of each month, starting with October 14th — during which week the National Safety Congress will convene in "The Heart of America." An especial program is planned for the Food Industry.

"We hope," reports President T. C. Manning, "that a number of the Superintendents and many Managers throughout the continent will plan to attend this nationally important Congress devoted to minimizing accidents and injuries — and reducing insurance rates."



ANOTHER DUST EXPLOSION

The fourth or fifth dust explosion so far this year occurred at Atchison, Kansas, on August 28th, gutting the four-story plant of the Lukens Milling Company and doing some \$150,000 damage. Fortunately the fire following did not envelop any of the workmen.

The headhouse of the elevator also burned to the ground.

The mill was in operation at the time of the blast, which is said to have originated in the dust collector on the fourth floor. For those interested in statistics the blow-up came at 8.15 Saturday morning.



YOUR PHOTOGRAPH

Several requests have gone forth for recent photographs of the Society's members to add to our exceptional collection. Some write they haven't had a photo take for thirty-five years . . . well maybe the family might like a new picture, too. Do it today!

DRIVING YOU B-U-G-H-O-U-S-E



Corn, especially, cannot stand appreciable handling or conditioning to reduce a weevil infestation due to the heavy damage resulting. At best such procedure merely retards or reduces the infestation by removing the adult insects. The immature stages continue to develop and cause more trouble and loss and repeated turning must be resorted to unless WEEVIL-CIDE is used.



WEEVIL-CIDE fumigation kills all stages—egg, pupal, larval and adult. The saving in damage alone from one extra turning will more than pay the cost of treatment. More important, once treated with WEEVIL-CIDE, your trouble and losses stop!

GILBERT SCHENK

THE WEEVIL-CIDE CO.

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KANSAS CITY, MISSOURI

CHICAGO CHAPTER ELECTS

By Emil Buelens, Secretary

Following a round-robin on dust explosions, house-keeping pointers and a fire fighting demonstration, the Chicago Chapter of the SGES elevated Jack Waterbury, Assistant Superintendent of Stratton Grain Company's Santa Fe Elevator to its Presidency, succeeding National Director Gilbert P. Lane of Arcady Farms Milling Company. Assisting are James Auld of Northwestern Malt & Grain Company as Vice President; Emil Buelens, Assistant Manager, The Glidden Company (soybeans) as Secretary, and Sandy Keir, Assistant Super of Bartlett Frazier's Wabash Elevator, as Assistant Secretary.

Directors include: John Hall, General Superintendent of Washburn Crosby; Walter Nowak, General Superintendent of Nowak Milling Corporation (feed) of Hammond; C. J. Alger, Chicago Office Manager of Corn Products Refining Company; B. I. Weller, President, Weller Metal Products Company, and H. G. Onstad, President of James Stewart Corporation.

In addition will serve the past presidents in the capacity of Honorary Directors. These are William H. Gassler, Superintendent, Rosenbaum Brothers' Calumet Elevator; Henry P. W. Keir, Superintendent Bartlett-Frazier's Wabash Elevator; Gilbert P. Lane, John J. Becker, retired Superintendent of Rosenbaum Brothers' Belt Elevator becomes Director Emeritus.

Serving on the Program Committee are B. P. Kline of Hales & Hunter, Riverdale; Fred E. Hawley, Norris Grain Company; E. H. Karp, Farm Credit Administration; V. M. Thurneau, Grand Trunk Elevator; Fred Rech, Chief Chemist of Arcady Farms Milling Company, Riverdale; E. G. R. Peterson of B. A. Eckhart Milling Company and Vincent Blum of John E. Bastien Grain Company's Hayford Elevator.

On Membership and Attendance are serving Director Nowak, Director Lane, Director Weller and Harry B. Olson on one team; Director Keir, Director Gassler, Director Onstad, and Russell B. Maas, Screw Conveyor Corporation, Hammond, Indiana, on the other team.

Director Alger will head the Chapter's Safety Committee assisted by Adolph Swendson, Grain Superintendent of Cargill, Incorporated's Northwestern Elevator; Director Buelens; Fred Hawley; Louis Rendell, Pratt Food Company, Hammond; George Lightfoot, Assistant

HEAD-HOUSE TEAM TAKES LEAD

By Henry Cox

President Orstad's "Head-House" (new membership) Team has taken a lead away from Director Beyer's "Power House" players, the score for the first two innings being 6-0. Spectacular playing by First Baseman T. C. Manning, President of the Kansas City District Chapter, brought in four of these runs during July and one during August. But for some good pinch-hitting work of Short Stop H. P. W. Keir, Second Vice President of the Society, President Manning could have claimed a two-inning solo-record to add to his laurels.

The third period is starting out a little differently, although the results between the teams are about the same, for Manning opened up by scoring three points and Keir brought in four more. Weller primed the opponents with two for an opener and Ed Raether, star from Minneapolis, brought in one more.

Superintendent Farmer's National Grain Corporation, and Russell Maas.

The September gathering of this chapter marks the opening of the sixth annual series of monthly meetings here.



E. R. ANDERSON
Norris Grain Co.,
Chicago



JOHN BECKER
Chicago, Retired



C. W. RILEY
Hart-Bartlett-
Sturtevant Grain Co.,
Kansas City, Kan.

How long the Head-House boys will keep their 10 point lead is a question, however the Power-House team aren't the sort to become upset over a 13-3 score — that only makes 'em go after 'em harder.

The Society welcomed its 363rd member this month.



TO WEAR HIS OWN CROWN?

By R. E. Browne, Secretary

T. C. Manning, President of the Kansas City Chapter of SGES, has offered a new Stetson hat to the member turning in the greatest number of acceptable, paid-up applications between September and January first. This strategic move on the part of the head of our Chapter promises results, although up until now he's been the only "producer" — and we're mighty proud that he's even leading the "national" race against some of our weathered "masters."



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Beats all adhesive tape!

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2. Exact weight of sample.
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No. 1763—1 pint capacity
No. 1765—1 quart capacity
No. 1767—2 quart capacity

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Philadelphia Pittsburgh San Francisco St. Louis

DID YOU KNOW?

Did you know that the Pre-Convention Number of "GRAIN" was printed in the Official Coronation colors, matched from samples?

RACE RETURNS

The "Maple-Leaf" Six walked away with the honors for the most new members in the annual Pre-Convention Race, sadly trailed by the "Eagle" Six, — but then Captain S. S. Orstad turned in 30 new memberships himself (a new high record), whereas the total of all other contestants was but 33. No, the bean-pie was omitted this year.

Here's the results in the order received:

S. S. Orstad, Federal Grain, Ltd., Ft. William	30
M. Frank Beyer, Grand Trunk Pacific, Ft. William	9
H. P. W. Keir, Bartlett Frazier Co., Chicago	8
Gilbert Schenk, Weevil-Cide Corp., Kansas City	8
Henry Cox, Star Grain Co., Gen- eral Mills, Chicago	5
Gilbert Lane, Arcady Farms Milling Co., Chicago	4
E. J. Raether, Brooks Elevator Co., Minneapolis	4
James Mackenzie, Three Rivers (Que.) Grain & Elev. Co.	4
T. C. Mannig, Uhlmann Grain Co., North Kansas City, Mo.	4
Jack Coughlin, Brooks Elevator Co., Minneapolis	3
Godfrey Morgan, Spencer Kellogg & Sons, Buffalo	3
Percy C. Poulton, N. M. Paterson & Co., Ltd., Ft. William	3
E. E. Frauenheim, Jr., Buffalo (N. Y.) Forwarding Corp.	3
B. I. Weller, Weller Metal Products Co., Chicago	2
Oscar W. Olsen, Peavey Duluth (Minn.) Terminal Co.	2
V. I. Champlin, Archer-Daniels- Midland Co., Minneapolis	1
Alan B. Starkey, Consolidated Ele- vator Co., Duluth	1
Paul Christensen, Monarch Elevator Co., Minneapolis	1
Louis Rendell, Pratt Food Co., Hammond, Ind.	1
William H. Gassler, Rosenbaum Brothers, Chicago	1
K. A. Miller, J. Allen Smith & Co., Knoxville, Tenn.	1
John A. Campbell, Canadian Con-	

solidated Grain Co., Ltd., Ft. William	1
F. Maynard Losie, Hallet & Carey Co., Minneapolis	1
Robert M. Sorenson, International Mfg. Co., New Prague	1
G. J. Shaw, Canadian Pac. Ry. Ele- vator, Ft. McNicoll	1
Arvid Anderson, Crowell Elevator Co., Omaha, Neb.	1
Harry B. Armstrong, Uhlmann Grain Co., Kansas City, Kan.	1



AMONG MY SOUVENIRS

By S. S. Orsted, National President

The souvenirs given to those attending the Superintendent's Convention were unique and indeed valued, — particularly since they were primarily designed for this auspicious occasion. But the stories upon this subject, which give me the biggest "kick" are the ones about the various and sundry uses to which the boys put their samples of Lubriplate grease.

When I announced these souvenirs I told the Members that this sample was for guns, fishing tackle, bald heads and other susceptible surfaces exposed to the elements out-of-doors, but the good thrifty souls who take their sports in-doors or in other ways have kept me in an uproar these past twelve weeks with the tales of



"what they did with their Lubriplate."

Now while it would be very indiscreet to mention any names nevertheless my reader's imagination probably won't carry them far wrong, so here's the story:

Some Superintendent down in Iowa who sports an electric clock in every room used his to grease his clocks. He formerly oiled them every week so he could hear the radio, but now says he can **even** hear his wife. That's great! (?)

One of the boys from Buffalo is planning on getting married soon and the story trickles back that he used his Lubriplate on the chimes on the Grandfather's clock at "her" house with marvelous results.

That jolly Super from Chicago now gets past the front door on lodge nights without waking up the missus, and after

all these years he's sure thankful to good ol' "Lubri-hinge."

Couple of the stories from Minneapolis and Duluth we can't print, but f'heaven's sake get yourself a sample — it's the greatest discovery of the decade. . . . Oh, yes, nearly forgot to mention, the product is supposed to reduce friction more effectively than anything most the boys have yet tried.



ABOUT SAFETY MEETINGS

The main purpose in holding safety meetings of plant employees is to acquaint them with your safety program and to enlist their support for this endeavor. The value of safety meetings for this purpose has long been recognized. However, meetings of employees — whether they are safety meetings, sales meetings, or held for another purpose—also have an added value because it presents an excellent opportunity for the management, the superintendents and the workmen to become better acquainted with each other.

It was not so very long ago—expressed in generations — when every stranger was looked upon as an enemy, and even today many of us look with distrust on someone whom we do not know. We may cuss unknown policies and unknown men but when we meet each other and get to know each other each of us is more tolerant toward the other fellow.

Someone made the statement not long ago that safety meetings among employees, during present conditions, were one of the best personal investments that could be made. Every foreman and nearly every workmen will fall in line to support a constructive safety program, and if they gladly and willingly follow your lead on this one subject it will be much easier for you to convince them as to the merits of your views on other subjects, — such as wages, working conditions, and other labor and personnel matters.

If you are not now holding any safety meetings and care to do so, if you will write me I will be glad to send you a brief memo. on the subject which will serve as a guide for you in carrying on such activities. — Clarence W. Turning, P. O. Box 261, Duluth, Minn., Executive Secretary, Safety Contest Committee.

AS IF YOUR LIFE DEPENDED UP IT

Act as carefully around machinery as if your life depended on it, — for it does!

PACIFIC NORTHWEST CHAPTER

Mr. Henry S. Cox: Note you have returned from your wonderful convention on the Canadian shores of Lake Superior. It goes without saying that yours truly would have enjoyed being there, too, but such a trip is easy to forget when the expenses are to be met in person, — as ordinarily Municipal Elevators are not interested in conventions which are held at a far distance.

Have given your letter about establishing a Pacific Northwest Chapter considerable thought and showed same to our Port Manager. He thought with favor with regards to a Chapter being established on the Pacific Coast in the event all would participate in it. . . . Our items of interest on the Coast would be of a different nature than yours in the Middle West. Of course, we are all interested in construction, building materials, and better elevators.

Why don't you ask some of the other boys out here, from Portland to Vancouver to write to me about this, for after all our distances are not great. Our busy time will be coming about the end of August but you can count on yours truly to take part in this new chapter. — R. G. Hunt, (Former First Vice President of the Society), Superintendent, Port of Tacoma (Washington) Elevator.

TO THE READERS OF "GRAIN"

I wish you would feel free to send me from time to time any comments on "GRAIN", criticisms, suggestions, material for publication with or without signature, ideas, etc., that may occur to you. I shall greatly appreciate hearing from you.—Sandy Keir, Editor.

DRAMATIC IRONY

CLEVELAND, Aug. 28.—On her way down the lakes is a ship with an unusual combination cargo.

The W. D. Rees of Cargo Carrier, Inc., loaded grain in her first, second and fourth compartments at Duluth Wednesday and to fill out the balance of the space took on 1,500 tons of iron ore in her third compartment. The ore will be unloaded either at Erie or Buffalo, with the grain consigned to Buffalo.

—Duluth Herald

CONTEST DEAD-LINE APPROACHING

By Oscar W. Olsen, Chairman

Well, fellows, you all voted for this continent-wide Safety Contest, now how about breaking down and sending in your entry form properly filled out and accompanied by check for \$6 to cover additional expenses necessary. Remember the dead-line is coming fast and don't you dare to "let me down!"

I believe a lot of our Superintendents plan on getting into this thing for the many advantages it holds for their men and their firms, but have just neglected doing so because of the press of other matters. But now that the movement has slackened up a bit and while we're waiting for the next deluge won't you, in all justice to your self, your men, your firm and your membership in the Society, write, wire or phone your decision to get in strong with both feet? Because if you don't, I'm going to take it for granted you've forgotten, enter you and bill you! O. K.?



'38 CONVENTION PROGRAM NEWS-FIGHTING DEMURRAGE



M. FRANK BEYER

We have been very busy here fighting a proposed demurrage. This came right on top of the close of the convention, so we have been in "high" for some time.

I have your letter officially thanking the Chapter and myself for our part in securing one hundred percent membership here and in helping to make the Eighth Annual Convention such a success. It is very gratifying to know that our efforts are appreciated. We felt that we had a duty to perform and did our best to keep our heels on the floor when it was necessary.

It might be interesting to know that the Associate's Night on June 16th marked the 45th year of service with the F. H. Peavey Company for me, having entered into their employ on June 17th, 1892.

Give my regards to all the boys. — Chapter President M. Frank Beyer, Grand Trunk Pacific Elevator Company, Ltd., Fort William.

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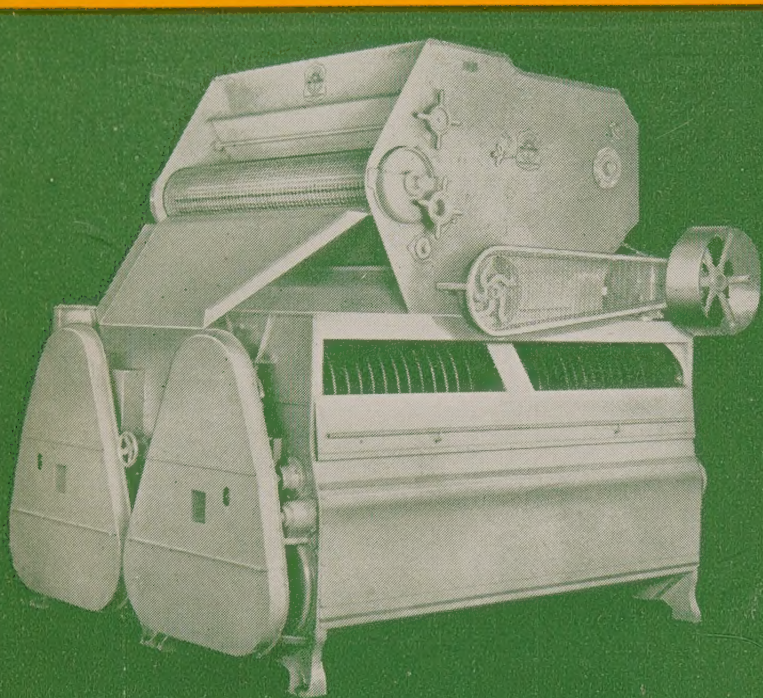
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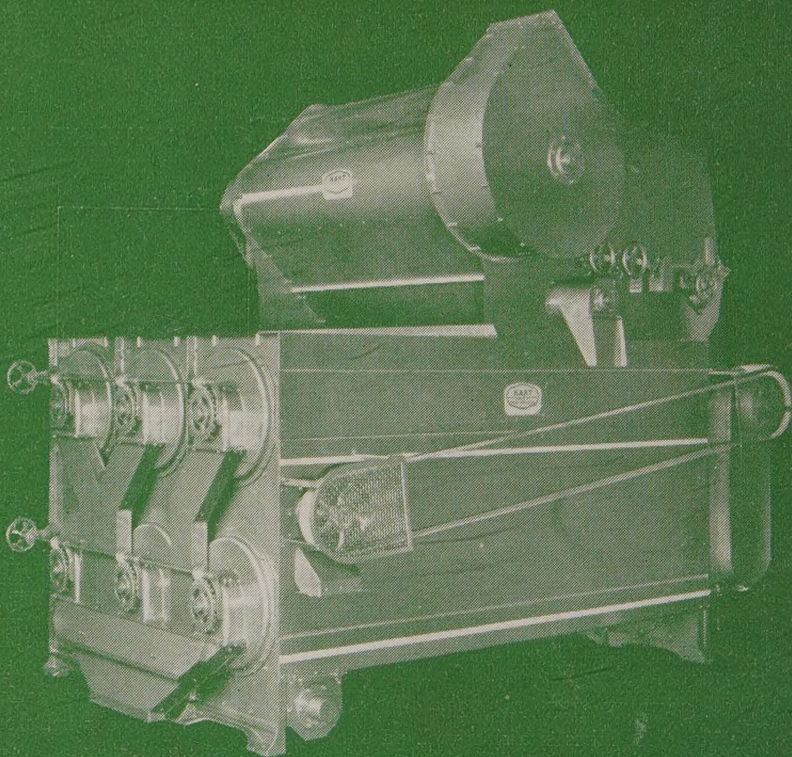
MAKE THE MOST ON THIS YEAR'S CROP

Cleaning and separating by length on the Carter Disc-Cylinder Separator — grading by plumpness on the new Hart Uni-Flow Width Grader. There's a money-making combination that can't be beaten! There's a combination that will make sizeable extra profits for you on this year's crop and on every year's crop.

The Carter Disc-Cylinder Separator combines the two most efficient grain cleaning units known — the Hart Indented Cylinder, and the Carter pocketed Disc, to give separations of unequalled exactness, with wide flexibility, at high capacity, and at low operating cost. The Carter Disc-Cylinder Separator is a complete cleaner, available with scalping and aspiration, making five major separations in one operation.

The Hart Uni-Flow Width Grader sets a new standard of efficiency, capacity, and flexibility in the grading of grain by plumpness. It will both needle and grade barley

for malting, and will grade by thickness wheat, durum, oats and rye. Don't pass up the possibilities these two great Hart-Carter machines offer you. Put them to work making money for you on this year's crop now!



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